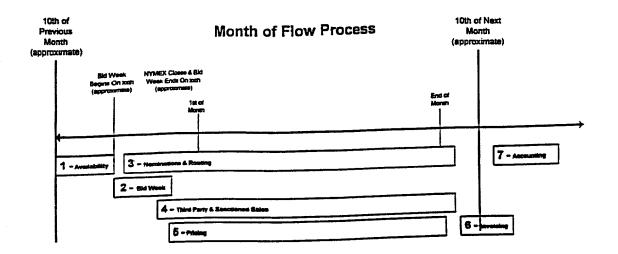
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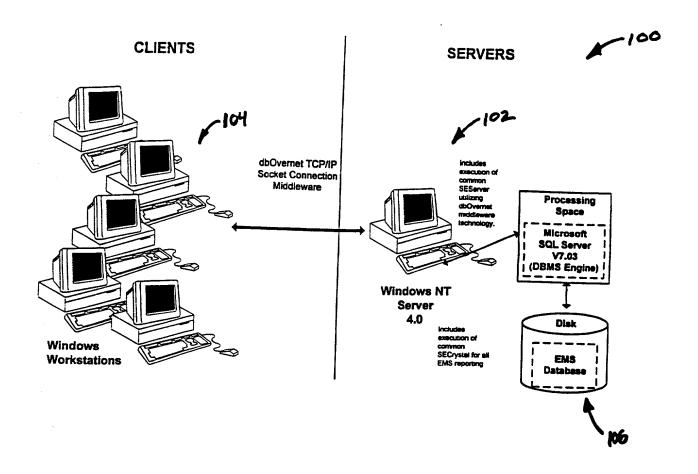
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# Companies Subject Area (ERD)

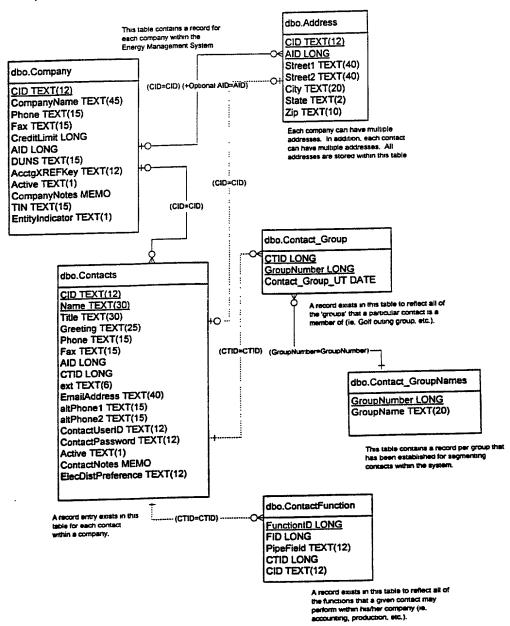


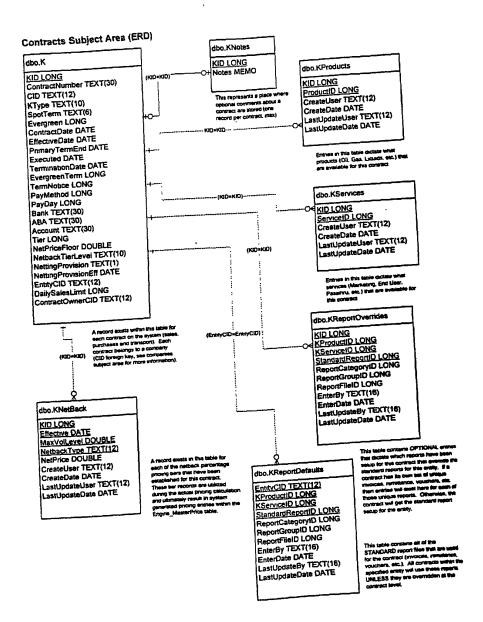
FIG. 3A

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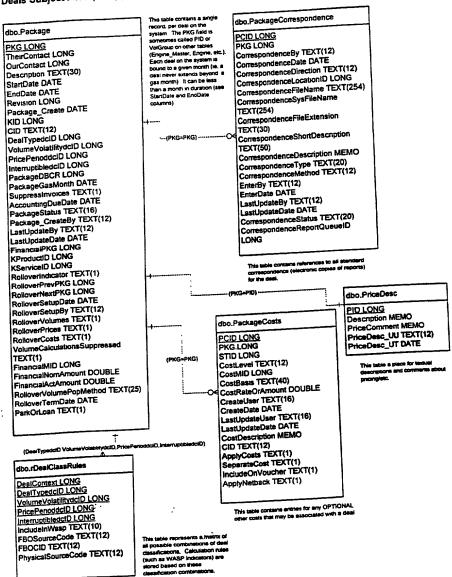


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Deals Subject Area (ERD) (1 of 2)



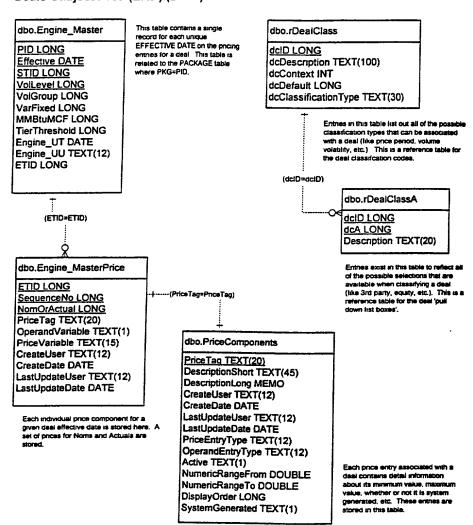
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# Deals Subject Area (ERD) (2 of 2)



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# Gas Inventory Subject Area (ERD) (1 of 2)

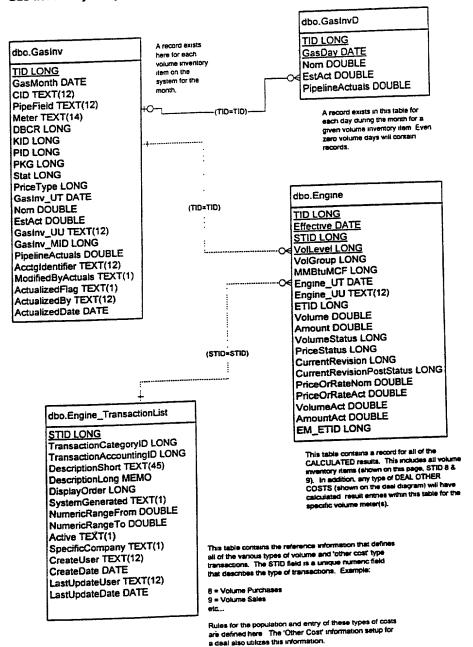


FIG. 3E

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# Gas Inventory Subject Area (ERD) (2 of 2)

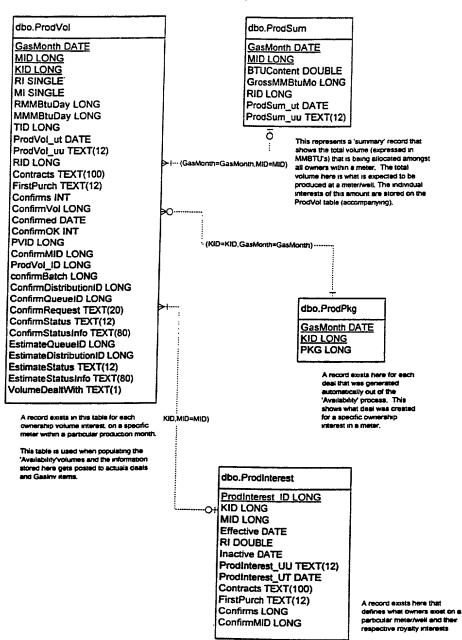


FIG. 3F

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### Operational Subject Area - 1 of 4 (ERD)

# dbo.PrinterDef PrinterNumber LONG

DisplayName TEXT(80)
ServerPrinterName TEXT(80)
InternalPrinter TEXT(1)

All printers defined in the system are stored in this table.

#### dbo.ApplicationMessages

ApplicationMessageID LONG
ApplicationMessageDate DATE
ApplicationMessageText TEXT(255)

This table contains application messages that normally only print to the server console (for example when a calculation is furning the messages are written here.

#### dbo.ExceptionCategories

ExceptionType TEXT(12)
ExceptionNo LONG
ExceptionShort TEXT(45)
ExceptionLong MEMO
CreateUser TEXT(12)
CreateDate DATE
LastUpdateUser TEXT(12)
LastUpdateDate DATE
ExceptionOrder LONG

This table contains record entries for all of the possible exception reason categories defined within the system. These reasons are based on the type of exception that occurs ("Dear, 'Pricing', etc.).

(ExceptionType=ExceptionType, ExceptionNo=ExceptionNo) ----(

#### dbo.LogTable

LogEntry LONG LogDateTime DATE LogInfo TEXT(254) This table is used primarily for debugging purposes and is not utilized byany screen or reporting process.

#### dbo.ExceptionList

ExceptionListID LONG
ExceptionType TEXT(12)
ExceptionKey LONG
ExceptionDate DATE
ExceptionDate DATE
ExceptionSequence LONG
ExceptionEvent TEXT(45)
ExceptionNo LONG
ExceptionBy TEXT(12)
ExceptionComments MEMO
CreateUser TEXT(12)
CreateDate DATE
LastUpdateUser TEXT(12)
LastUpdateDate DATE

This table contains the actual exception event entries. The ExceptionKey and sequence columns associate the exception to the entity based on type (#e. PKGID would be the key for ExceptionType = 'DEAL').

# dbo.rGasMonth

GasMonth DATE
CurrentStatus TEXT(20)
CurrentSequence LONG
CreateUser TEXT(12)
CreateDate DATE
LastUpdateUser TEXT(12)
LastUpdateDate DATE
LockedUser TEXT(12)
LockedUser TEXT(12)
LockedDate DATE

One record exists in this table for every production month in the system. In addition, this table conteins the CURRENT status field ("Availability, "Sales", 4th.).

#### dbo.rGasMonthStatus

GasMonth DATE
CurrentSequence LONG
Status TEXT(20)
CreateUser TEXT(12)
CreateDate DATE
LastUpdateUser TEXT(12)
LastUpdateDate DATE

This table represents an 'audit' table that captures the production month information EVERYTIME the status is changed. This provides for detail analysis on how long production months are left in a particular status.

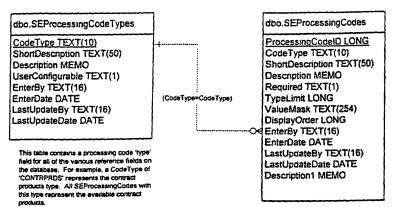
(GasMonth=GasMonth)

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# Operational Subject Area - 2 of 4 (ERD)



This table contains a record for each unique processing code on the system. For exemple a processing-code of 113 and a CodeType="CONTRPRIDS" has a short description of 'Gat'. This represents the gas contract product

#### dbo.SELocations

LocationID LONG
LocationUNCPath TEXT(254)
LocationName TEXT(30)
LocationDescription MEMO
LocationDescription MEMO
LocationOrder LONG
EnterBy TEXT(16)
EnterDate DATE
LastUpdateBy TEXT(16)
LastUpdateDate DATE

This table contains record entries for all of the locations (server paths) that are used within the system.

#### dbo.SEMessages

MessagesSubsystem TEXT(10)
MessagesID LONG
MessagesType TEXT(10)
MessageDescription MEMO
EnterBy TEXT(16)
EnterDate DATE
LastUpdateBy TEXT(16)
LastUpdateDate DATE

This table contains record anthes for all of the application messages (error, confirmational, informational, etc.).

#### dbo.SEAudit

AuditID LONG
AuditSys TEXT(30)
AuditEvent TEXT(30)
AuditBy TEXT(16)
AuditDateTime DATE
AuditText TEXT(255)

This table consums record entries for auditable events that are captured within the system. Reports are written to review this information. An example is the "Login" attempts anylor the actualization attempts (by pipeffield).

#### dbo.SElmages

ImageType TEXT(12)
ImageKey TEXT(16)
ImageScreen MEMO
ImageReport MEMO
ImageShortDescription TEXT(60)
ImageDescription MEMO
CreateDate DATE
CreateUser TEXT(16)
LastUpdateDate DATE
LastUpdateUser TEXT(16)

This table contains record entries for all standard-system graphic images. Letterheed logos, screen graphic logos, etc.

FIG. 3H

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### Operational Subject Area - 3 of 4 (ERD)

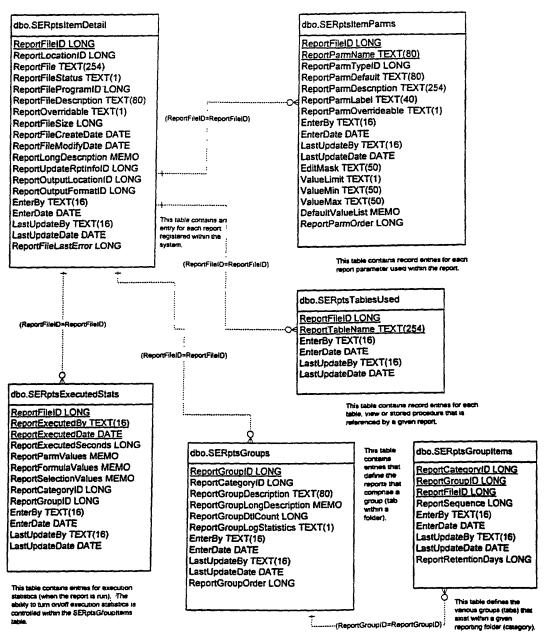


FIG. 3I

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### Operational Subject Area - 4 of 4 (ERD)

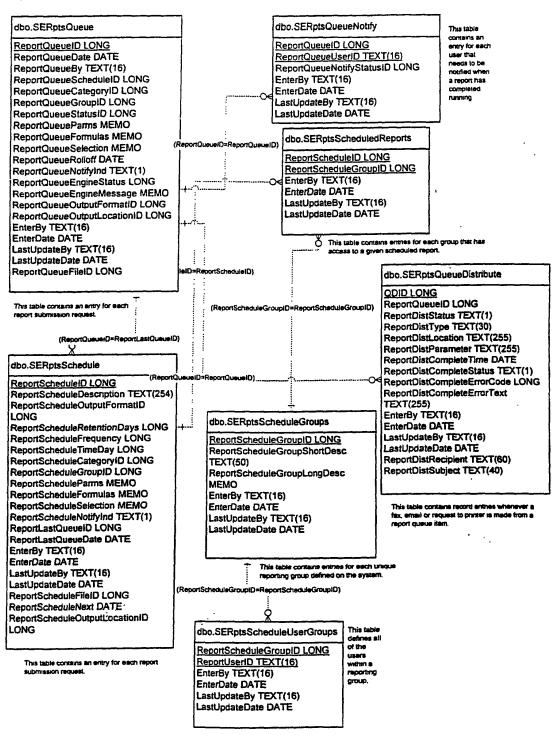


FIG. 3J

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Pipes & Meters Subject Area (ERD)

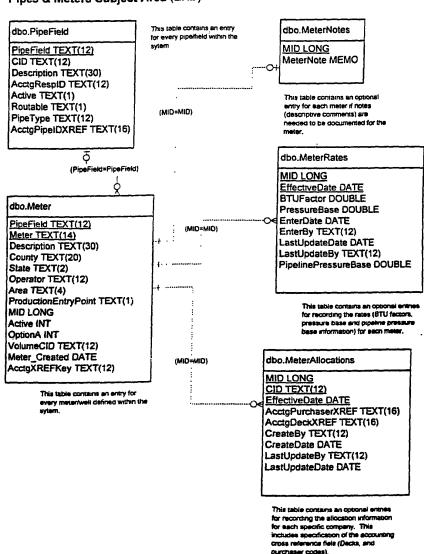


FIG. 3K

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Pricing Subject Area (ERD)

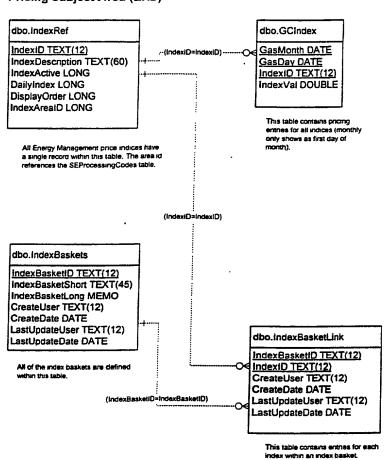


FIG. 3L

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# Routing Subject Area (ERD)

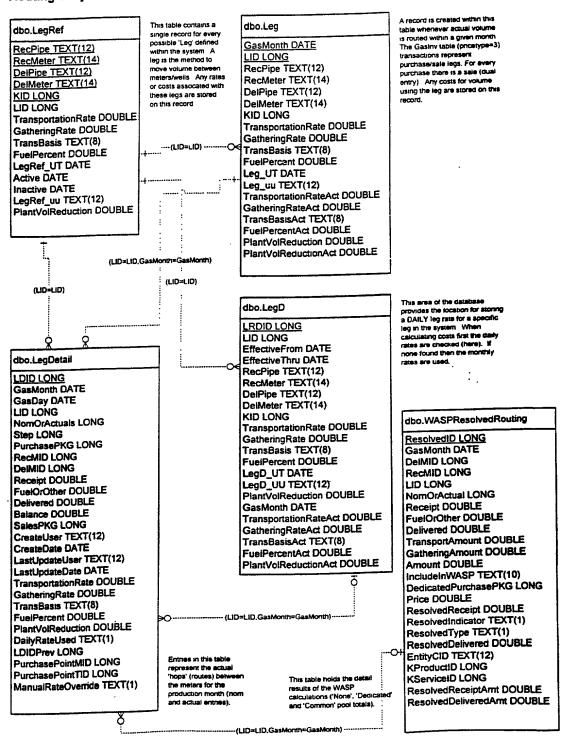


FIG. 3M

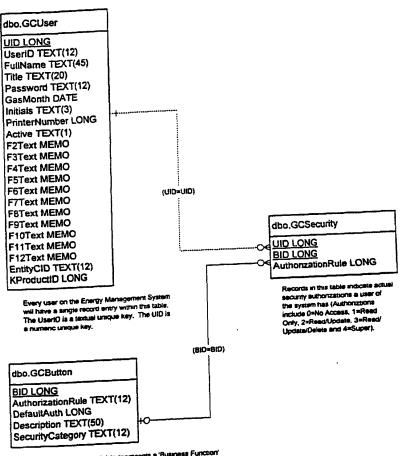
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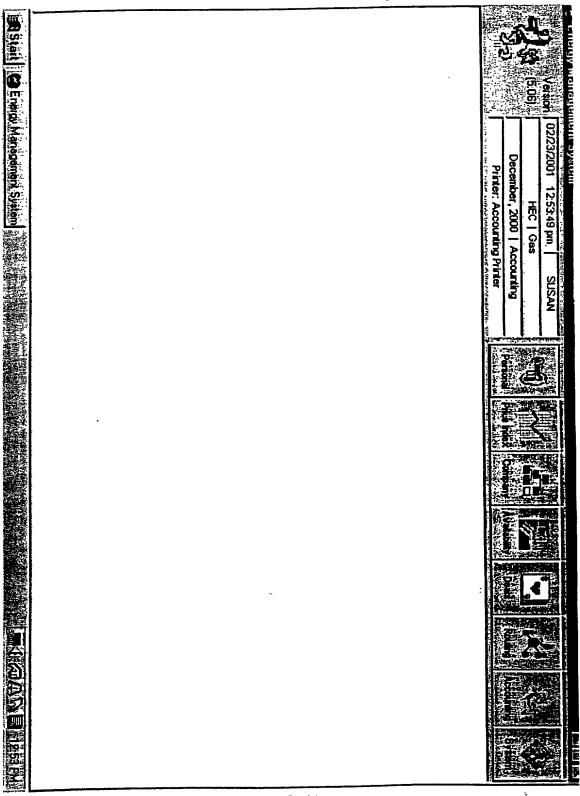
# Security Subject Area (ERD)



Each record within this table represents a 'Business Function' within the Energy Management System. These records are used to establish security on the system. Each entry is categorized as either for 'Employee' or 'Company' in order to differentiate between employee access rules and customer access rules.

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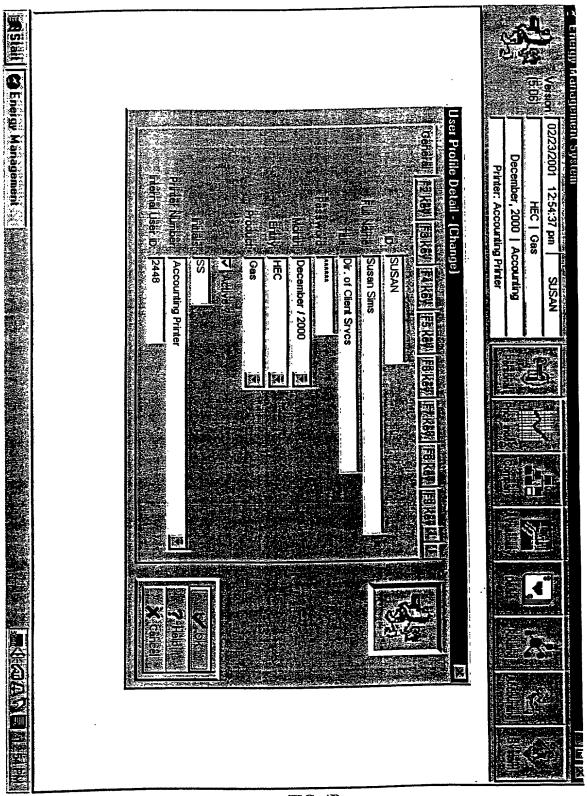
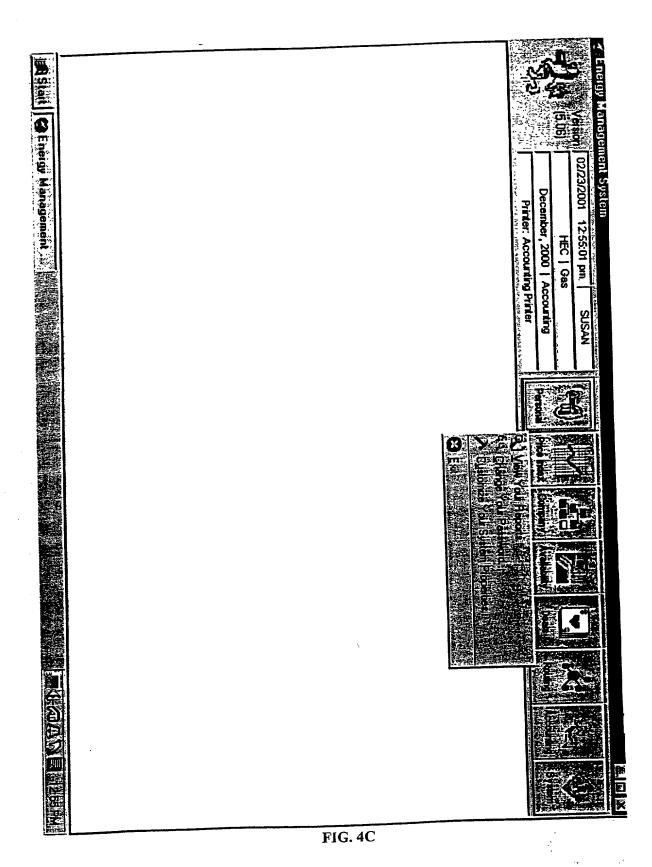


FIG. 4B

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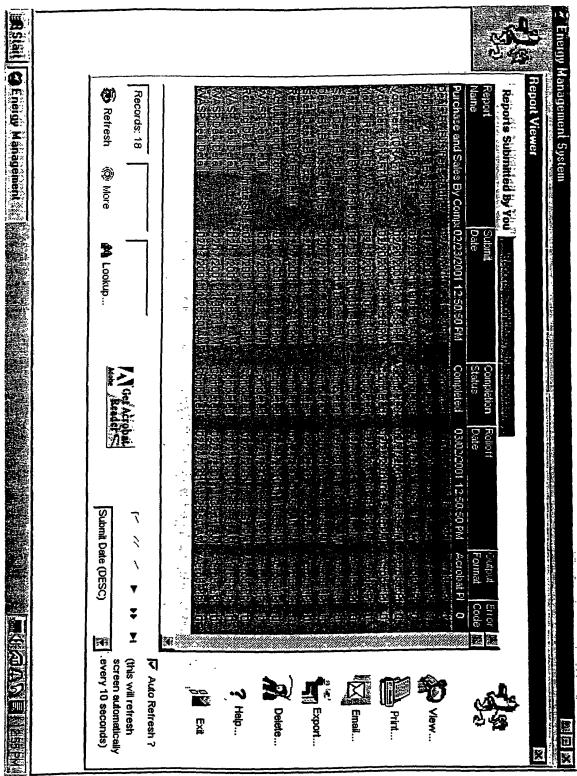


FIG. 4D

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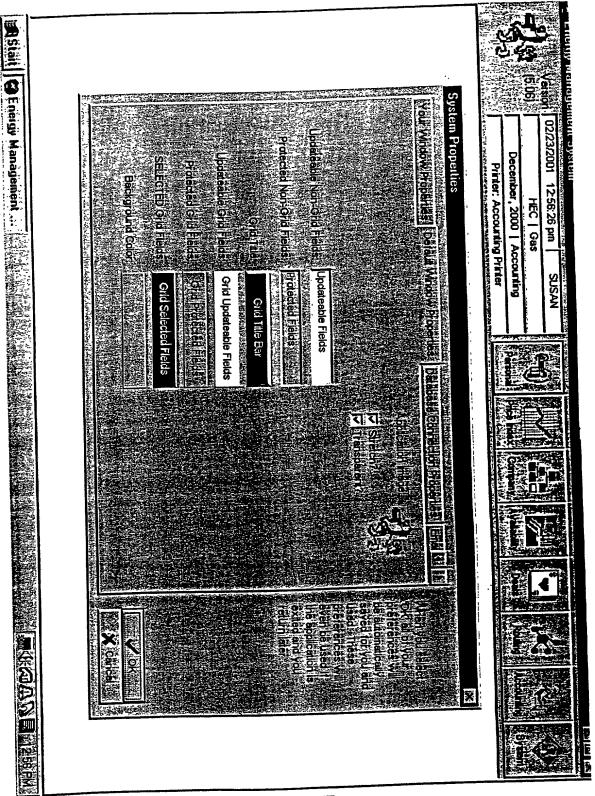
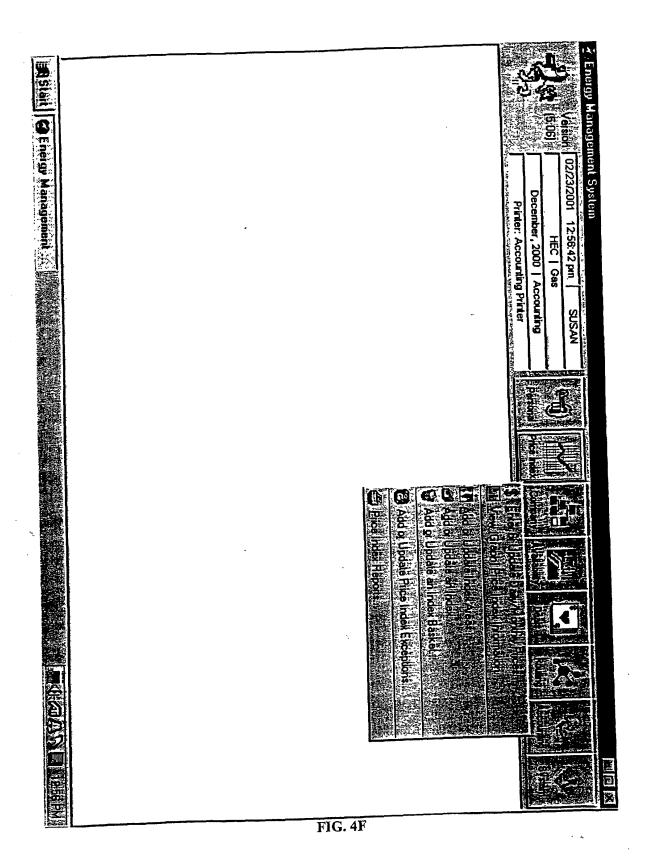


FIG. 4E

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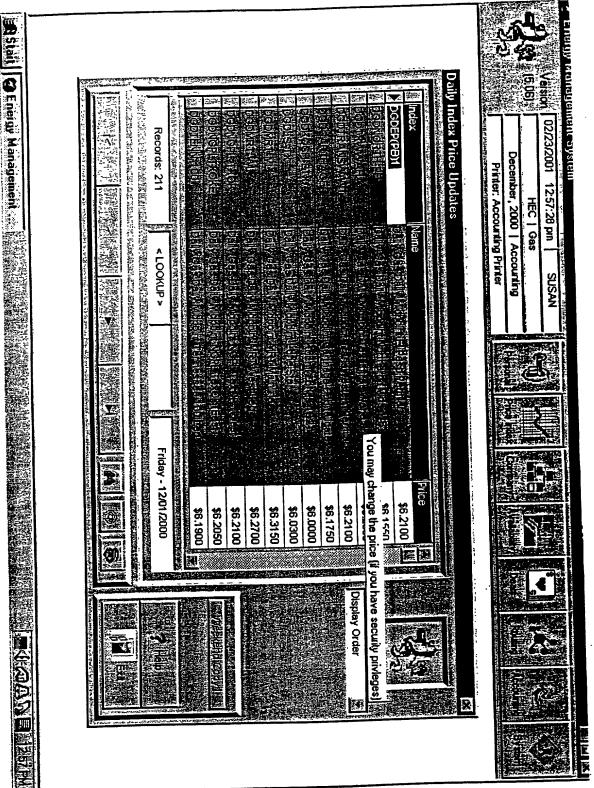


FIG. 4G

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Eneigy Management System Sources: Inside F.E.R.C.'s 'Gas Market Report' and Financial Times Energy 'Gas Daily Report'. Monthly index prices only contain price entries on the 1st day of the month and these prices are used throughout the month. Index Prices By Month Cheigy Management Refresh I **‡** ٥ More. Į Day 8 2/02 12/04 12/06 12/08 12/10 12/12 12/14 12/16 12/18 12/20 12/22 12/24 12/26 12/28 12/30 Į. Area or Pipe/Field: Graphical View Month Index: GDA Permian Basin Area |Daily Gas Daily Midpoint El Paso Permian December / 2000 A) X: Cancel gi **24**5

FIG. 4H

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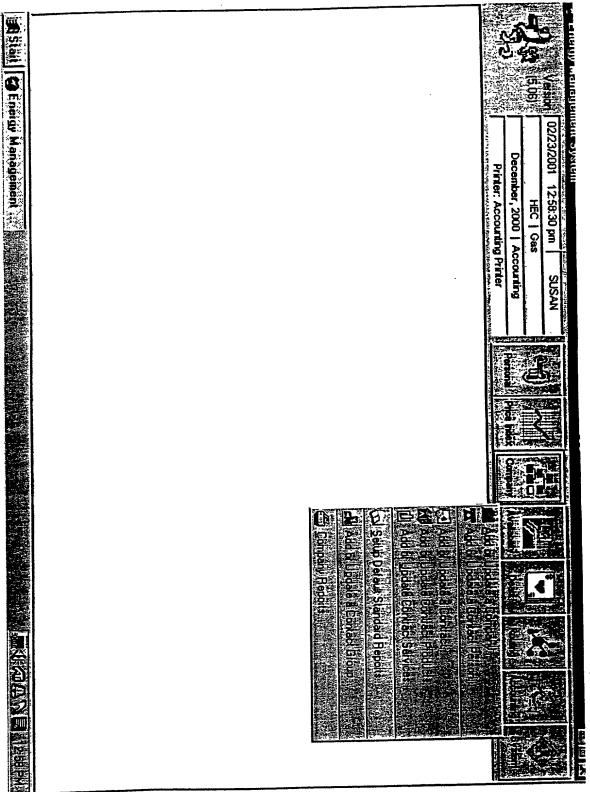
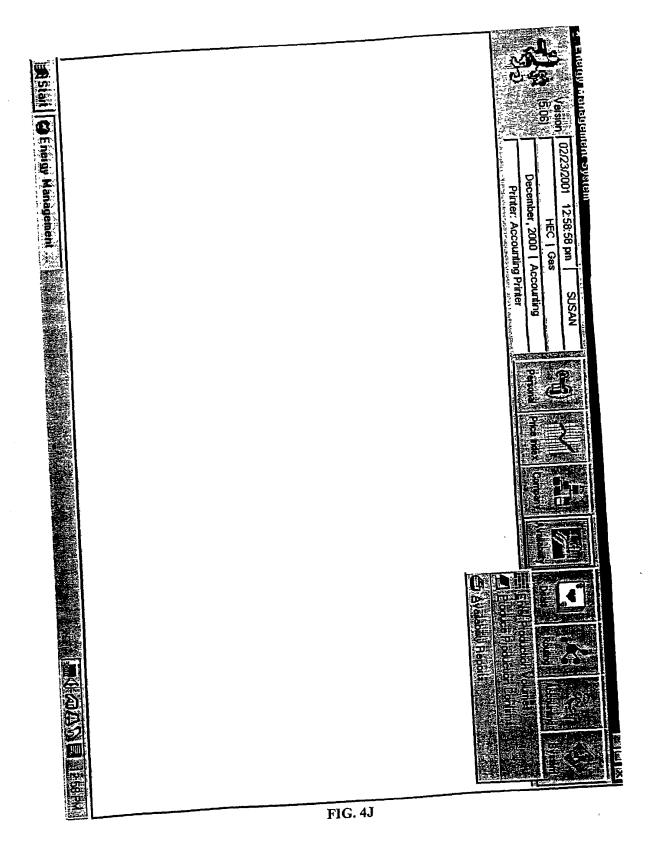


FIG. 4I

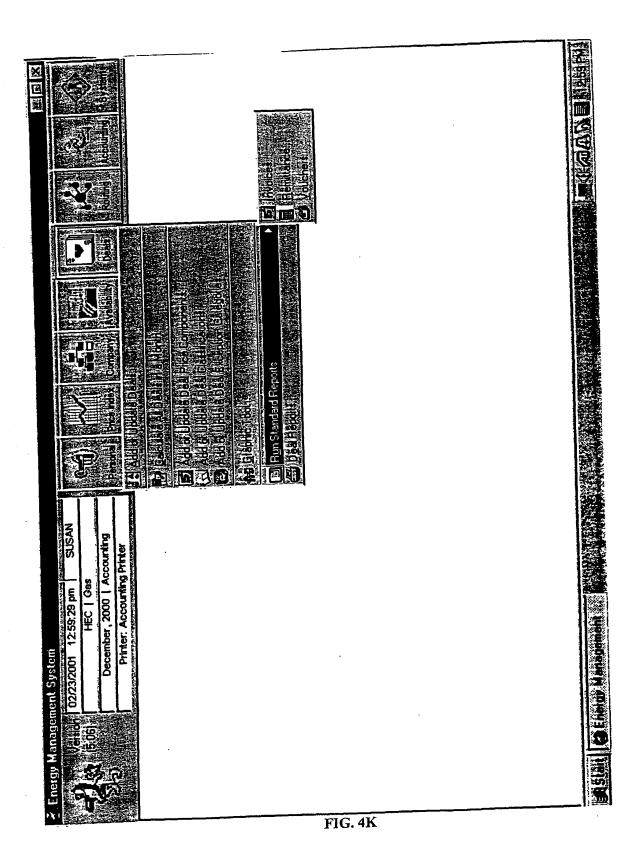
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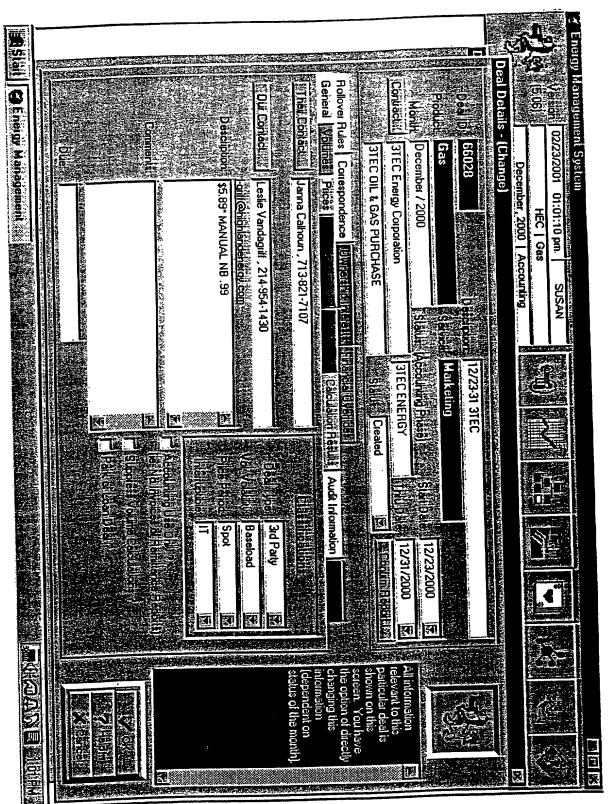
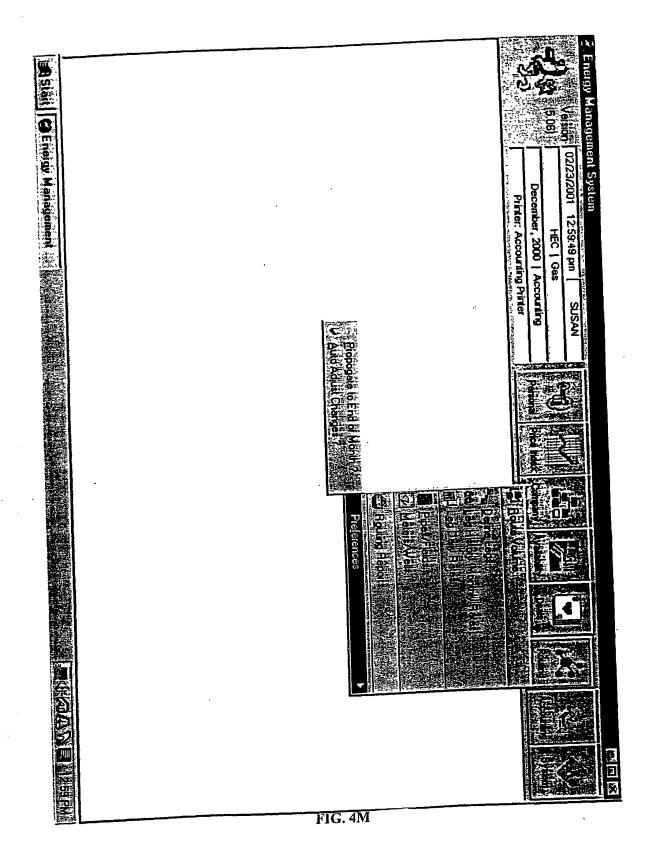


FIG. 4L

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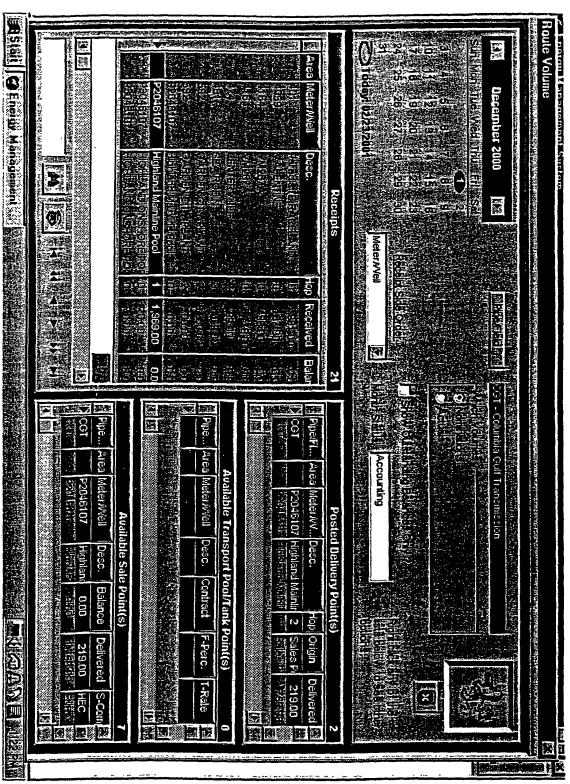
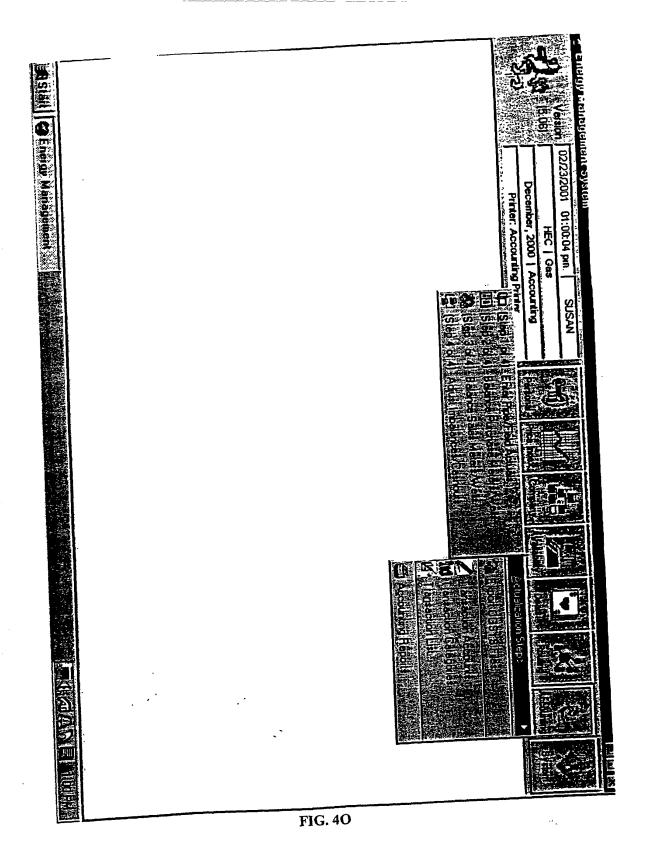


FIG. 4N

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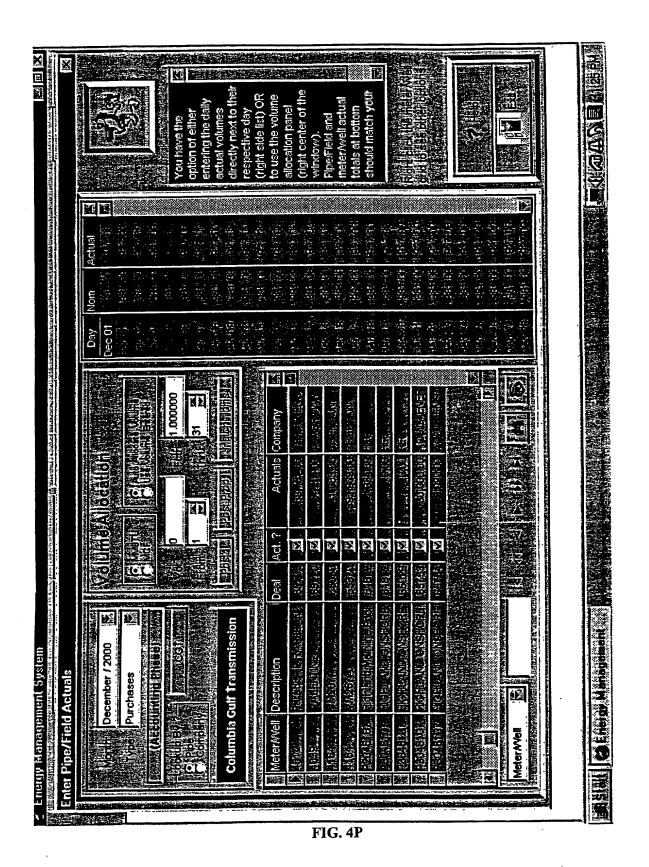


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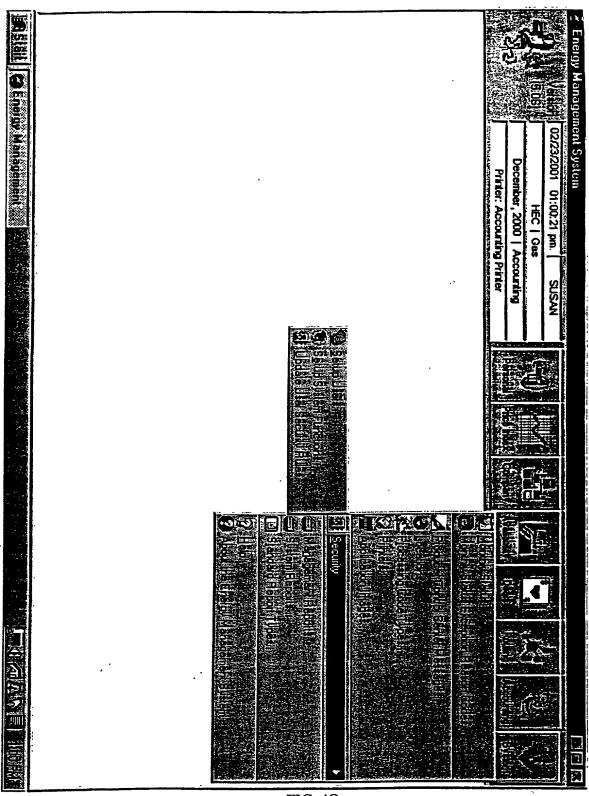


FIG. 4Q

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# **WASP Calculation Diagram**

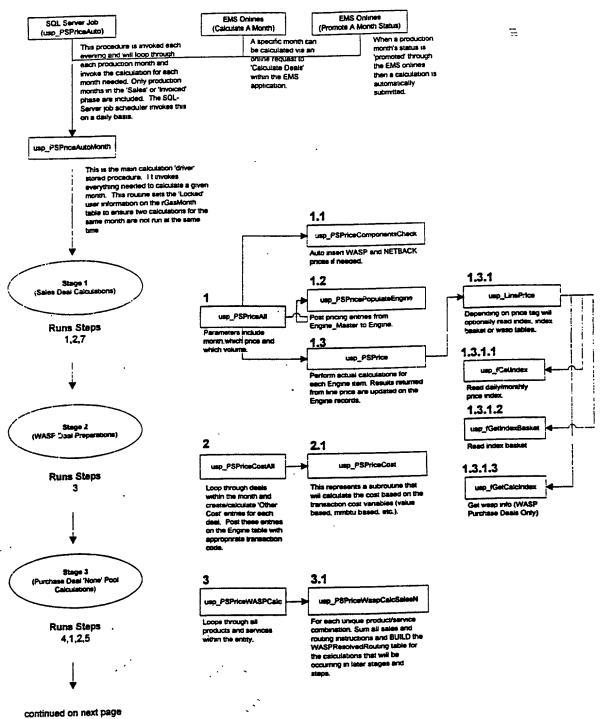


FIG. 5A

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# WASP Calculation Diagram (2 of 2)

continued from previous page usp\_PSPnceWaspCalcResolveDnver This procedure will loop through each product and service and invoke the resolve routines for each unique usp\_PSPriceWaspCalcResolveN Stage 4 (Purchase Deal 'Dedicated' Pool This procedure invokes the iterative combination process which loops back from all the sales points to originating purchase Calculations) **Runs Steps** 4,1,2 usp\_PSPriceWASPDivieOutProceedsN Stage 5 (Purchase Deal 'Common' Pool Calculations) Move any of the financial proceeds that were overridden to their respective deal OR WASP meters This takes the profit OR WASP meters. This cakes me pro-ror (loss) and makes the adjustments. Only 3rd party deals can have their proceeds 'divied'. The primary table updated through this process is the WASPResolvedRouting table. **Runs Steps** 4,1,2 6 usp\_PSPriceTransportAll This routine will create all of the Gaslov (Transportation Cost Calculations) 'PriceType=3' inventory records and associated Engine (calculated) results These system generated transport costs include transport, gathering, fuel and pvr Runs Steps 6 7 usp\_PSPriceAnyNewInvoicesNeeded

> This routine only gets executed if the production month status is set to 'Invoiced' This routine will ensure that an invoice number gets assigned if no number currently exists (for new sales entries introduced during the actualization

4.1.1

usp\_PSPriceWaspCaicResolveSalesN

HIGHLY ITERATIVE process that attempts to track all sales meters back to original purchase meters. The WASPResolvedRouting table is the primary table utilized here.